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All correspondence should be addressed to the Editor, Hobbies Weekly, Dereham, Norfolk

YOUR £200 CHANCE !

1958 Fretwork Competition

Complete this design for

•**OWL**?



PERPETUAL CALENDAR

Here is another excellent chance to win one of the valuable prizes offered by Hobbies in the 1958 Fretwork Competition. Prize vouchers and other awards to the total value of £200 will again be offered, and all owners of a fretsaw should take advantage of this wonderful opportunity.

Entry is free and all competitors have to do is complete the design for the Owl Perpetual Calendar and send it in for judging not later than April 30th, 1958. There are two sections to the competition — for seniors (16 and over) and juniors (15 years and under). The competition piece is the same in both cases, and the main awards are detailed on page 354.

It will be seen that vouchers are offered as prizes enabling winners to obtain any of Hobbies goods listed in their Annual to the amount of the voucher. Tools, kits, machines, materials, etc., can thus be obtained, and in this way competitors are enabled to add to their equipment and enlarge their scope of work.

In addition to the main awards there are prize vouchers for £1 for those who just fail to enter the main prize list, and there are dozens of other valuable consolation prizes and Certificates of Merit for work which qualifies accord-

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World Radio History

FOR ALL HOME CRAFTSMEN Over 60 years of 'Do-it-Yourself'



ing to the decision of the judges. The winner of the first prize in the Senior Section becomes the champion fretcutter for 1958 and holds the magnificent Challenge Cup for a year. A replica is retained permanently.

WORK WITH A KIT

Kit No. 3228 for making the **Owl Perpetual Calendar con**tains panels of wood, hinge, calendar set, etc. Obtainable from branches or Hobbies Ltd., Dereham, Norfolk, price 5/3 (post free.)

The Open Section and the Junior Section will be judged independently, and young workers, who compete with entries in a limited age group, therefore stand an excellent chance of qualifying for a prize. In the junior section it must be specifically understood that entries must have been made by those under 16 years of age, with no help from an

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adult, and the receipt of an entry will be taken as a guarantee that this is so.

The subject of the competition is an ideal one for making up as a gift. The wise old owl sits benignly on the crescent moon, surveying the night scene, and on the right of the design there is provision for a compartment in which to place the perpetual calendar cards, thus making this an ideal all-theyear-round gift.

OA LENIDA R MAKING THE.

THE makeup of the Owl Perpetual Calendar is quite simple, consisting

of in. overlays which are glued on to a solid plain ‡in. backboard. Provision for the accommodation of the calendar cards is made by the addition of a further overlay.

All parts are shown full size on the design sheet, so that workers can paste the design down to the appropriate thicknesses of wood and cut to the outlines. Experienced workers will, however, prefer to trace the individual pieces and transfer their shapes by means of carbon paper on to the wood. This method, of course, saves the need for scraping off the paper.

Cut out with the fretsaw, all the shapes indicated, keeping to the lines as closely as possible and maintaining the saw in an upright position. Care will be

to obscure any of the cutting work. Read the rules carefully and make up your mind to be in the 1958 prize list.

As this is a fretwork competition, the

main accent in the judging will, of

course, be concentrated on the fret-

cutting. An attractive finish will also

influence the judges, but it must be

emphasised that if paint is used this

should not be applied too thickly, so as

needed in cutting some of the very fine frets, and workers should endeavour to attain as clean an outline as possible.

When all the parts have been cut out, clean up with glasspaper and glue them in the positions according to their various numbers indicated by dotted lines on the design sheet. Make sure the pieces are glued in their exact positions, so as to form a symmetrical picture.

To form the slot in which the calendar cards will be placed, pieces 7 and 8 are glued on top of pieces 2 and 6, thus forming a rebate. To complete the assembly, hinge the strut centrally on the back for the purpose of standing.

This is a subject which lends itself to individual taste in finish by painting or by staining and polishing. If the background is painted, scrape the paint to form a key when gluing on the overlays.

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958 COMPETITION—PRIZES TO THE VALUE OF £200

OPEN SECTION

JUNIOR SECTION

ξ	Ist Prize 2nd Prize	•	٠	•	•	Voucher	for	£15	15	0			(15	years	of a	ge a	ind under)					3
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3	6th Prize							£4	- 4	0		Prize					99	,,,	£3	3	0	5
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5	lith and 12t	h Pri	zes	•	۰		**	£I	10	6												S
	Vouchers for £1 will be awarded for the next 48 best entries In addition, dozens of other valuable prizes and Certificates of Merit will be awarded Winners of the vouchers may choose any Hobbies goods to the value of the prizes won RULES																					
	 All entries Points will An entry m Entries mus 1958. A label beat judged, mu 	be awa ust be it be s ring tl st be	arded the u ent to ne nar firmly	for th unaide the C ne and y stuc	ie d Cor d a k l	quality of t effort of th mpetition ddress of	the fi ne co Dep the c	retcu mper t., Ho comp	ttin tito obbi etit	g, p r. T ies l or,	s the exo s rule mo d., Derel e, and So	cellence o ust be stri ham, Nor ection of	f the f ictly a folk, t the C	finish idhere io rea ompe	(pair ed to ch th titio	nting Iere n foi	g, staining, not later t r which th	han e en	Apri try is	to	be	wwww

RULES

- 2. Points will be awarded for the quality of the fretcutting, plus the excellence of the finish (painting, staining, etc.)
- 3. An entry must be the unaided effort of the competitor. This rule must be strictly adhered to.

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- 4. Entries must be sent to the Competition Dept., Hobbies Ltd., Dereham, Norfolk, to reach there not later than April 30th, 1958.
- 5. A label bearing the name and address of the competitor, age, and Section of the Competition for which the entry is to be judged, must be firmly stuck behind the entry. Competitors who wish their entries returned must include a 1/- P.O. to cover cost of repacking and postage.
- 6. Because of Customs restrictions, etc., entries are confined to those from Great Britain and Northern Ireland.
- 7. Prizewinners will be notified by June 30th, 1958, and details will also be given in Hobbies Weekly.
- 8. Hobbies Ltd. cannot accept responsibility for any loss or damage to entries, but all reasonable care will be taken with them. 9. The judges' decisions are final, and no correspondence can be entered into.

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HERE have been nine 'Vanguards' during the history of our fighting navy. They were, 1, Gallion of the Elizabethan era, 2, a second rate 1630 (two gun decks), 3, Commonwealth two decker 1653, 4, third rate of 1735-45 (one gun deck), 5, a third rate 1798, 6, two decker with frigate type bow, 7, Ironclad of 1869, 8, Dreadnought type battleship of 1909, and lastly the modern battleship that figured in the Royal Tour. (From The Nine Vanguards, Lieut.-Comdr. P. K. Kemp, R.N.)

Here is a suggestion for some enthusiastic modeller. What about a model of each one of the Vanguards to scale? This would make an interesting and valuable set of models.

Navigation lamps

The navigation lamps or lights are foremast lamp, port and starboard lamps, mainmast lamp and stern lamp. The masthead lamps are usually of copper or brass and in general of cylindrical shape, the back is flat to butt against the mast and they are mounted on a tray fixed to the mast. The foremast lamp is mounted just above the crosstrees, the mainmast lamp is mounted near the mast head. Both these lights are white; the stern light is also white.

The port light (red) and the starboard (green) are of similar shape and are mounted in a bracket with two sides as in sketch. These are situated on the wings of the bridge, in the case of sailing ships, on the shrouds.

These can, for small models, be modelled in bristol board, using small beads painted in correct colour, to represent the actual lamps.

Colour of the hull in early warships Elizabethan period

Hull, natural oak colour, oiled and varnished, wales, red, green or black. Upper works were painted gaily in the well known geometrical patterns; there was very little carved or gilded work at this period. The figurehead, when there was one, was usually symbolic (i.e. lion. etc) or else heraldic.

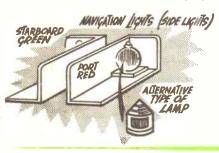
The inside of the bulwarks was painted red, as were the insides of the port lids and all deadeyes and blocks.

From 1610 to 1703 approximately, the hull was as above, but the upper works changed from the brightly painted geometric designs to the black or blue. carrying gilded and carved work, of the Stuart period.

From then on to 1775, the upper works continued to carry the same colour and were still covered with gilded carved work, but the hull became varnished oak or was painted yellow.

A simple way to paint flags and other intricate designs

Many modellers find difficulty in painting the small designs on flags and pennants. We cannot all be artists of course, and I know several modellers who assist one another in this way by





each helping the other in the work he does best.

Obtain the necessary colours in the new indelible coloured pencils now on sale at art shops. They can be sharpened to very fine points and with these you can draw (or trace) the most intricate detail and fine lines. Having done this you can blend the strokes on the main bodies of colour with a fine camel hair brush dipped in water. If you draw them on silk or other material it is not necessary to use the wet brush --- the strokes will blend together on cloth without any treatment.

To weather fabric sails

When using fabric for sails it often improves the appearance of the model if the sails are given a weathered appearance. This can be done by dipping them in cold tea or coffee and when dry, giving them a coat of clear lacquer. sprayed on if possible.

Hobbies' **Crossword N**

Note: Figures in parentheses denote the number of letters in the words required.

27.

ACROSS:

- 1. Lima is its capital (4).
- 4. I'm more than sure to suspect something here (7).
- 8. Name of no uncertain origin (4).
- 9. Somewhat mature fairy! (4).
- 10. Where to go for spectacles (7). 11. A leading light in the arts (4).
- 12. Jupiter's wife (4).
- 14. Liable to be unclear to the man in the street (7).

************** *** SOLUTION WILL BE -GIVEN NEXT WEEK ******

DOWN:

- 2. Be sure to look round the lower world whilst there (6).
- Unions should be in this of course 3. (6).
- 4. She keeps America in her heart (5).
- 5. False (6).
 6. It's indeed worthy of imitation (5).
- March king (5).
 Of course it's only right! (4).
- 13. Skittle number (4).
- 15. Flat (4).
- 16. Music-maker (4).
- ---- for an hour, perhaps, then mourn a year' Pope (6). 18.
- 20. Near (6).
- A sling seen on the railway (6). 21.
- 23. Gives the artist some encouragement perhaps (5).
- 24. He may take the part of a Croat (5).
- 25. It would of course be a mistake (5).

Business-like sort of fellow (7) 29. Where strangers are welcome (4). 30. Empty (4).

17. Consuming (5).

22. Scene of action! (7).

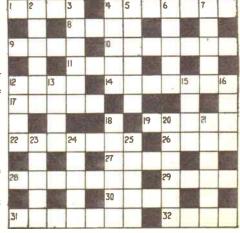
19. Corpulent (5).

This should get you going (7). 31.

26. You may take her round to lunch (4).

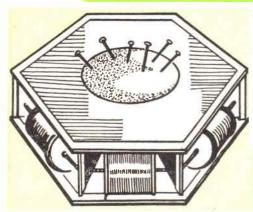
38. They're likely to slip through your fingers (4)

Troubles with the added risk involved (4).



Novelty to make

Cotton Reel Pincushion



USEFUL cotton reel holder and combined pincushion can be quickly made from a few oddments of cardboard and surplus wallpaper. The only other material required is a little passe partout to supply a neat binding for the edges.

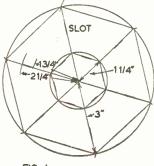


FIG. 1

We need four pieces of cardboard prepared in the form of a hexagon as shown in Fig. 1. Two of these, for the outer top and outer base, should be a little stouter than the other two and material from an old carton will be quite suitable.

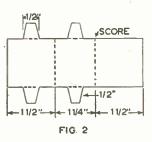
On one of the thinner pieces for use inside, describe a circle with your compass using a radius of 3ins. then with the same radius mark off this same distance around the circumference as shown by the arcs, giving six equal divisions. Now join these points through the centre, marking out the shape and cutting out. This piece forms a pattern for the other three and it is a simple matter to run a pencil round the perimeter without making further measurements.

Described by S. H. Longbottom

Now take the first piece again, marking out a circle with a l\$in. radius, drawing in the central hexagon as shown. You will also observe that this diagram shows thickened lines where slots are

cut in the card to allow the passage of tabs for our divisions. Use your compass again for marking the correct positions, using the radii given. Cut these slots with a sharp knife, place the card on the other thinner piece, marking the slot positions and cutting.

We now require six smaller pieces of

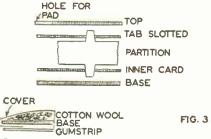


thin cardboard to make partitions for our reel holder. These are cut exactly as shown in Fig. 2 where you will note that $\frac{1}{2}$ in. tabs are tapered for slotting through the inner pieces. That part on the left forms one wall, the centre portion forms the back while the one on the right forms an adjoining wall for the next partition and to which it is later glued. Score on the dotted lines, then cover on both sides with your wallpaper. If you wish you may cover some cardboard with wallpaper, measuring out one shape then preparing the others from this pattern, but note that they must all be exactly alike, and scored before folding.

You may now cover one side of the two inner pieces with wallpaper, afterwards clearing the slots from the unpapered side with a penknife. With these two pieces prepared and the partitions ready, they may be fitted together. Pass the tabs through the slots, remembering to fit so that the papered side is inside, apply glue, bend over and leave under a weight until dry.

While the glue is setting the other two pieces of card may be prepared for fitting. One of these forms the base and only needs covering on one side with wallpaper. The other piece is the top where the pincushion is fitted in the centre. Make a hole in the centre 14 ins. in diameter. You may do this by marking out with your compass and piercing the circumference with a needle, then pushing the waste through. This circle of card should be retained. Smooth off the hole with a piece of fine glasspaper, then apply the wallpaper. When you come to the hole, cut the paper into segments, push through the hole. attaching to the inside surface of the card.

Obtain a small piece of silk, or cotton material to make a suitable pincushion to fit the hole. You may use the circle of cardboard for a base, plus a little cotton wool padding. Here you will have to use your own judgment for the size



PINCUSHION

of the cushion and the amount of padding, but it should not project too high above the level of the top. Cover the cotton wool and card with the material, glue to the back of the card, reinforcing with paper gumstrip. Fig. 3 shows a section of the pincushion. We are now ready for the final assembly.

Figure 3 shows a sectional diagram of the various parts which are best fitted together in the following way. First attach the base, with wallpapered surface on the outside, applying a liberal coating of glue, to the other part already fitted with the partitions. Place your small, flat pincushion in the centre after applying glue, with the top hexagon the last part to be fixed over the cushion. Note that there must be good adhesion around the cushion and it is better to arrange weights on this area until dry. **© Continued on page 357**

Photography Tips by E. G. Gaze

DISTANT VIEWS



A wide general view running to a natural horizon, snapped with the three points (a) (b) and (c) in mind. A print that is interesting and with the impression of depth to the far distance retained because the gaze lingers before reaching the horizon.

WHEN viewing the final print of an open wide scene — that is, a scene which runs from foreground to a distant or natural horizon the beginner to this type of photography often finds that the view, which appealed so strongly to him at the time of snapping,now seems completely uninteresting. And this disappointment often gives the impression that views stretching to the far distance lose their very sense of spaciousness by being compressed on to the small area of the negative and resultant print.

The error in this attitude can be shown by a visit to a photographic exhibition, or by studying magazines showing wide distant views. But, too often, the beginner's prints lack life and interest; and all detail seems to merge into a final dull horizon line, and all sense of airy spaciousness and depth of distance is lost.

The key to such disappointing prints may, apart from poor weather and lighting conditions, be traced to a lack of suitable position and composing the scene without emphasis on visually vital points of interest.

The aim is to produce a print which shows depth, which leads the gaze from foreground to horizon not in one full swoop — but causes the gaze to linger. When viewing such wide scenes before snapping, the eye ranges from point to point, lingering here and there before finally resting its gaze on the blue distance.

To capture the visual-interest of such scenes on a print we need to bear the following two points in mind as a very useful general guide:

1. When snapping a broad view, sunlight is essential, unless one is striving to capture the effect of mist which hints at hidden distances. Sunlight broken into patches of shade by cloud is helpful, and rarely sunlight falling from immediately behind the photographer — or from

directly in front unless some near foreground object is thereby brilliantly silhouetted.

2. The eye interest should be led from foreground to middle distance and then finally to the softness of the horizon. It is here that the beginner usually makes his mistake. The wide view, to the eye, looks visually attractive — because the gaze ranges from point to point. Compressing the wide view on to a small area means loss of small detail — and loss of eye-interest; there is nothing for the gaze to range on, nothing to hold the gaze in foreground, middle distance.

(a) the foreground should be visually interesting, with sunlight and shade. Some near object, contrastingly lit to hold the interest, and also to give scale to the middle distance. The middle distance should also be broken visually by contrast and objects that dominate, and again give scale.

(b) This scaling of points of interest from foreground to middle distance gives the impression of spaciousness lack of it tends to take the gaze from foreground to far distance in one sweep, compressing visually your already compressed breadth and depth of view.

(c) The far distances rely not on detail or high contrasts, but a lower tonal scale itself suggestive of distance but unless eye-interest is sufficient in foreground and middle distance it is true, as a general view, that the whole print lacks life.

The illustration makes use of these three points: foreground contrast and objects giving scale with middle distance again causing the gaze to linger. The far-middle distance although lacking in contrast and detail is still of interest visually with the irregular shapes of dark trees, and finally we have the horizon merging to a low tonal value.

Continued from page 356

Cotton Reel Pincushion

To provide a neat finish, the edges may be glasspapered and then bound with a suitably coloured passe partout tape. This not only strengthens the holder but hides the two pieces of card and the top and bottom, and the adjoining partitions.

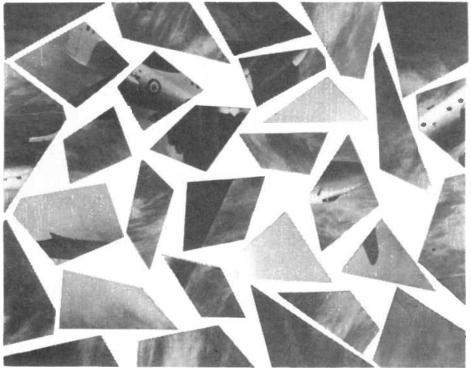
Reels of cotton are retained in their respective compartments by threading a strong silk cord through holes made in the partition walls. Test the position of these by placing a reel temporarily in place, marking similar points on every wall. Brass eyelets can be fitted, if available, to prevent wear and tear, or you may perhaps be able to force in small beads.

Finally, the silk is passed through each partition hole and reel compartment by compartment until you have six reels in position, tying the ends of the silk firmly. Cotton can be reeled off quite easily without removing the reels, while pins and needles may be kept close at hand in the pincushion.

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Jig-Quiz No. 2

AIRCRAFT SPOTTING



OUNT the illustration on stiff card, cut out the pieces and fit together to form an attractive picture of a four jet research aeroplane only six of which have been built and operated during the last seven years.

When the first of these aircraft made its debut at the Farnborough Air Display in 1950 it heralded a period of intensive study of problems associated with the high altitude operation of large jet aeroplanes.

All six machines are being used as flying test beds to investigate the behaviour of airframes, engines and a multitude of aircraft equipment when they are subjected to the icy and rarefied air thousands of feet up.

Prior to their introduction there were no large jet-propelled aircraft capable of sustained high altitude flying so that research was limited by aircraft size and consequent short duration. It was impossible to install in these small aeroplanes the mass of instruments and recording equipment with which each of these six aircraft are packed.

The subject of our Jig-Quiz can therefore be aptly described as a Flying Laboratory. It is spacious and it is *pressurised* — which means that inside the fuselage is a huge 'cylinder', which houses the normal flight crew of four, and which by mechanical means keeps the atmospheric pressure at a reasonable level inside the aeroplane. For instance at 40,000ft. an internal atmosphere

pressure equivalent to that at only 8,000ft. is obtained. This makes it possible for the engineers to stay aloft for long periods in comparative comfort.

When you have completed the puzzle can you name the aeroplane?

Solution next week.

Plasticine Modelling for Amateurs

As with that first fretwork outfit, so which the first box of Plasticine who cannot recall the thrill of those early attempts in creative amusement? Indeed, it is not an extravagance to claim that Plasticine, like fretwork, has figured somewhere in the early hobbies of us all.

It is with great pleasure, therefore, that we note the appearance of 'Plasticine Modelling for Amateurs' written by A. V. Blanchard to cater for the hitherto neglected needs of the keen amateur who is trying to produce work above the usual standard of home work.

The hints contained in this book are

bound to improve the standard of modelling, and, being given in the simplest language, with the avoidance of technical terms whenever possible, cannot fail to be completely understood by the average reader.

The modelling of the human head is dealt with in great detail, one step at a time, with excellent covering photographs, and there are equally interesting sections devoted to the modelling of animals and figures, to casting, and armature making.

Published by Harbutt's Plasticine Ltd., Bathampton, Bath, Somerset—Price 1/6 (by post 3d. extra).

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THE staking and tying of plants is an important garden operation, but one that is frequently neglected. It is sad to see a healthy and vigorous specimen sprawling all over the place just because it was not adequately staked, or, perhaps, another has a mass of misshapen stems and deformed growth.

When a plant is properly staked and tied up from the very first it stands a better chance of growing up and developing as nature intended it should. The air can circulate better and it is much more attractive to look at.

Probably because of the amount of labour involved, tying with a ball of string is looked upon with distaste and left until the very last moment, or not done at all. Why not save yourself all this bother by making some horticultural rings to slip round the stem and stake?

They are fixed in a jiffy, do not look unsightly and can be used over and over again. Made from galvanized iron wire they do not rust and can be made quickly and easily. Wind the wire round a piece of dowel rod or similar former, slide off and cut up, leaving a slight overlap (Fig. 1).

The gauge to use will depend on the size of the ring and to a certain extent on the kind of plant for which it is required. For small rings 20 S.W.G. will be strong enough, lin. rings need 18 S.W.G., while the $1\frac{1}{2}$ ins. size can be 16 S.W.G.

Sweet pea growers largely use these

rings and they are therefore, sometimes called sweet pea rings, but they are quite suitable for almost any other type of plant.

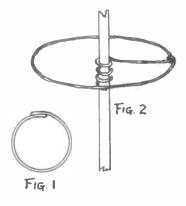
By A. F. Taylor

One main stake or cane is all that is wanted and on to this two or three ring supports are clipped at intervals of about 6ins. to 8ins., according to the height and vigour of the plant. The rings are best added as the plant grows, starting at the bottom, then the stems will grow up inside and lie naturally around the ring.

The size of the rings may be varied to suit a variety of plants, Sins. diameter being a general average. Galvanized iron wire of 16 S.W.G. will be strong enough for this size, and even for larger diameters up to about 8ins. The join in the ring may be soldered, but this should not be necessary if the end is coiled round and nipped up tightly with pliers.

Two or three coils in the centre are usually sufficient to hold the ring securely on the stake. If a cane is used, then the nodes are useful and keep the ring from sliding down, otherwise it must be nipped up to fit the stake.

When a plant, such as a pot grown perpetual or border carnation, which has a number of stems, needs staking, then something on a larger scale is required. Fig. 2 shows an excellent type

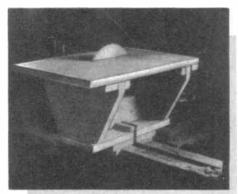


of ring plant support used by carnation growers. It keeps the plant supported in a natural way and as no tying is needed, it has much to recommend it.



THIS picture will interest all lovers of models and miniatures, for it shows a perfect scale miniature tramcar which is capable of holding twenty-seven or so small children. The rail gauge is 15ins. and the car takes current for its running from an overhead cable through a correctly reproduced trolley. The car can be seen at Rhyl, North Wales.

(H.A.R.)



VEN though small, a circular saw is a handy item of workshop equipment and the photographs show a detachable one that a craftsman of Cheshire made to fit on to his lathe. Disc and cutting table are quickly fixed in position and just as readily taken away. Cost of the whole outfit was very moderate.

The saw itself (8ins. diam.) is fastened to the lathe spindle, and Fig. 1 shows how it is done by the adapter (E). Made of brass, this is bored and internally threaded at the one end to go on the externally threaded spindle, while at the other it is turned down to a short length of small diameter (F) which just goes through the centre hole of the saw. This length is also threaded to take the nut (H), which, with the washer shown, keeps the disc tightly in place.

Details of the cutting table are given in Fig. 2. Sides and base are of lin. wood to give robustness, but the top is }in. plywood, plywood being used because it is perfectly flat and in this

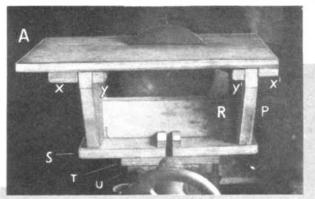
Novel attachment



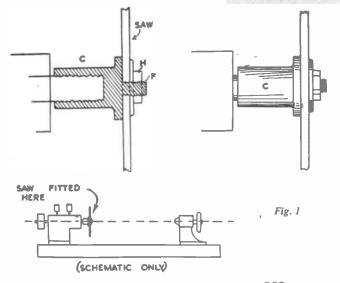
Described by H. Robinson

thickness will not warp. The top is secured at one end only by hinges.

The sides (P) are truncated as shown, being 10ins. wide at the top (and for $1\frac{1}{2}$ ins. down), and 6ins. at the bottom. Between these verticals goes a rectangle of wood (R) to act as a spacer and give rigidity to the whole structure. This is 11ins, wide and 3ins, high. When the sides are fastened to (R), the three pieces are secured to the base (S) which is 6ins, by 14ins., and also to a second piece (T), 6ins, by 8ins. Screwed onto this last are the strips (U) 6ins, long and of 1in. square section, their purpose being to make the table sit tightly and neatly across the main longitudinals of the lathe — for other types other arrangements would be necessary.



The saw, showing parts. Note: the 8 inch bolt is not in position.



There are thus three levels of wood at the base of the frame, and these are all bored and held firmly together by two 3½ins. bolts at either side, as shown in the cross-section, which gives extreme firmness to the whole frame without complicated construction.

Sides (P) are secured by three 2ins. screws taken up through the top layer of the base pieces, and are given extra strength by screws through to the spacer (R), which is of sufficient thickness to receive them in its ends. Two more strips of wood are put along the top edges of the sides (Y and Y1). They are 10ins. by 1in. by 1in. and are to help in giving a good bearing surface when the table top is in its 'down' position. Both are held by screws into the top edges of the sides.

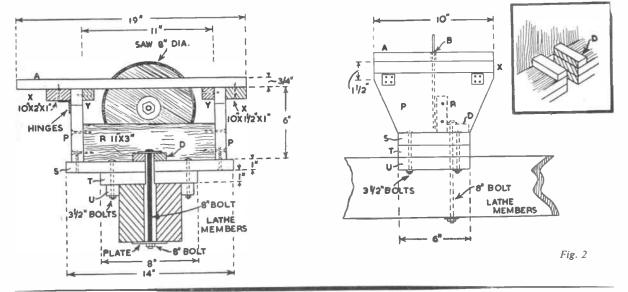
The sawing surface (A) is 19ins. by 10ins., and, as mentioned, of $\frac{1}{2}$ in. plywood. At positions agreeing with the outer sides of the walls are the strips (X) and (X1), 10ins. by 2ins. by 1in. and

10ins. by 1½ins. by 1in. respectively, the latter being flush against the end and the other 14½ins. in. At this end the top is secured to the vertical by two stout hinges. Thus pivoted, the table can be raised through a small angle which means that the amount of saw protruding can be varied, allowing of grooving. To hold the top at a desired height only a little packing is needed, the angle being very slight. (A) is slotted at its centre for 7ins. as (B) to take the saw. The slot is about $\frac{1}{2}$ in. wide.

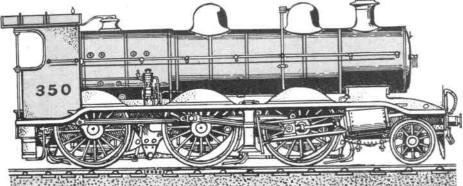
The base pieces are slotted as far as (\mathbf{R}) as shown in inset to Fig. 2, the channel sides being reinforced by the strips (\mathbf{D}) , lin. by $\frac{1}{2}$ section. This channel is to receive the 8in. bolt which goes between the main members of the lathe to hold the table firm; it also allows of the table being finely adjusted with respect to the saw. In practice it has been found that the bolt is only really necessary for heavy work, the

table being so solid that for medium cutting it is not needed.

A 'fence' (not shown in the photograph) is desirable on the sawing surface, and one has been made. It is only a block of wood with bolt holes in it and corresponding holes in (A) so that it can be held in several positions in relation to the spinning disc. Its purpose is to act as a base when cutting strips of equal thickness, and to give a true 90° when cutting right-angles.







UR illustration shows engine No. 350, one of the well-known 2-6-0'K' class, the first of which was built at Brighton in September 1913. The first engine, No. 337, embodied many new features on the L.B. & S.C.R., including the Belpaire boiler, and six coupled wheels with pony truck — all new to Brighton standards at that time. The engines were designed by Mr. L. B. Billinton, the Locomotive Superintendent and carried the following leading features: cylinders, two 21 ins. by 26 ins., coupled wheels diameter 5ft. 6in., pony 3ft. 6ins., steam pressure 170lb. per sq. in. Total weight of engine in working order $63\frac{3}{4}$ tons. These engines were the first on the L.B. & S.C.R. in which Mr. Billinton introduced his method of iop feed for the boilers, the apparatus having a two-dome arrangement, as shown. The class totalled seventeen engines, built between 1913 and 1921. (A.J.R.)



ON'T encourage spectators who come and talk. They only put you off your task, and distract you. Your attention taken off your float for a second or two may well spoil your chances.

Don't keep watching your fellow competitors to right and left of you. Whilst watching their doings you may miss a 'bite' — and that might make all the difference to your catch.

Use fine tackle — but good quality stuff it must be. Test all tackles, whether of gut or nylon, before use.

Keep your baits nice and handy, and your keep-net within easy reach. Your landing-net should be ready by your side all the time. Keep a number of spare hooks and casts ready made up and shotted in case of a breakage or in the event of a necessity to make a change in the kind of bottom tackle you desire to use, as, for instance, when a shoal of big fish invade your pitch.

Look for flaws

Always use the best baits procurable, and let them be perfectly fresh. This also applies to ground-baits.

It is, by the way, a sensible plan to examine your hook tackle from time to time, and change hook and cast if you discern the slightest flaw that may develop. You will not consider the time wasted when a big fish takes the bait.

To use a cast, whether of gut or nylon or other material, with a flaw in it or which has become frayed near the shank of the hook may easily snap under the sudden tug of a good fish, is asking for trouble.

A lot will depend upon the kinds of baits you fish with in a match. In a contest of limited duration it is very essential to have with you baits most likely to attract the fish quickly.

For match work good lively maggots take some whacking — the bigger ones for the hook, the smaller ones to throw in the water as groundbait, from time to time in order to keep the fish nosing around in your 'swim'. Coloured maggots, dyed (Chrysoidine, yellow; Auramine O, lemon; Rhodamine, B, red) are often useful for a change, but if you have only the pure natural maggots you need not worry, for they kill fish quite as well as the coloured ones.

For flavouring and scenting ground baits, paste, stewed wheat, etc., pilchard oil and various mixtures are used. Most of the colourings and baits mentioned above can be obtained from tackle shops, as well as tinned baits such as creed wheat and stewed hemp.

When the water is 'peasoupy' and coloured with rain washings, worms red worms, brandlings, lobworms will be worth a trial. And if there are chub in the stream you are fishing, cubes of cheese and paste made from cheese will be very useful as baits. Bread cubes cut from the side of a loaf previously soaked in water, are also tempting to such fish as roach and dace. Creed wheat and barley (pearl) stewed are among other titbits that fish like. Whatever kinds of baits you take to the waterside it is imperative that they should be fresh and clean.

Big - or small

It is an interesting question whether the match angler should lay himself out to catch big fish or to concentrate on small but more easily-caught fish. To-



day, many of the competitors in angling matches prefer to go for the small fish. They think it pays to do so, and that numbers count more than quality. It is true that a match-fisher is more likely to catch twenty or more smallish or medium-sized fish than half-a-dozen good fish weighing, in the aggregate, 4 lbs. or 5 lbs.

In match fishing much depends upon the fish present in the water fished. A few good-sized bream in a 'swim' will make all the difference to the competitor's chances of getting the prize. If he discovers that big fish are present, then it behoves him to set himself the task of catching them, ignoring the small roach and gudgeon. One big bream will weigh as much as a dozen or more 4 ozs. fish.

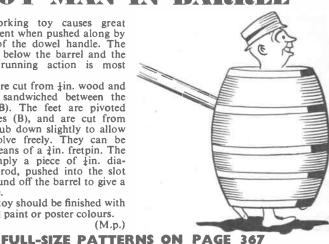
In matches, practice, quickness, concentration, preparedness for action, good hook-baits, skilful groundbaiting, adaptability, versatility, and one's own commonsense — these are the factors that combine to ensure a good chance of success. Above all, keep hard at your fishing from the starting signal until the 'cease fishing' whistle goes. Never slack off, even though things seem hopeless.

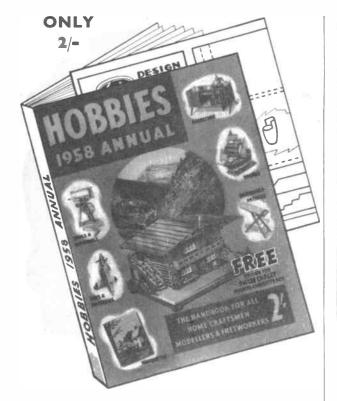


HIS working toy causes great amusement when pushed along by means of the dowel handle. The feet protrude below the barrel and the walking or running action is most realistic.

All pieces are cut from 1 in. wood and piece (A) is sandwiched between the two pieces (B). The feet are pivoted between pieces (B), and are cut from in. wood. Rub down slightly to allow them to revolve freely. They can be secured by means of a ‡in. fretpin. The handle is simply a piece of $\frac{1}{2}$ in. diameter round rod, pushed into the slot provided. Round off the barrel to give a realistic shape.

The whole toy should be finished with plastic enamel paint or poster colours. (M.p.)





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Around the house BE PREPARED FOR ODD JOBS

WHETHER you live in a house or a flat, large or small, the odd repair job will invariably crop up at some time or another. With present day prices soaring and incomes unable to keep up to them, sending for the local builder, or the plumber, or the electrician, is often quite out of the question. The man in the house — and sometimes the woman — has to set to and execute the best job possible.

If the right tools are used with poor materials, or good materials with the wrong tools, it is hopeless to expect a first-rate piece of work.

Even more important is the obtaining of a sure knowledge of ways and means before the repair is attempted. Handyman books and text books of all kinds are expensive and possibly out of reach of many a household but this does not prevent the ambitious one from securing the necessary details. Practically every type of book required for household repair work can be referred to or probably obtained on loan for a period from a library.

The tools for the job

A tidy tool kit kept either in the garage or in a generally acceptable place inside the house should be recognized as important a feature of the home as all other sections for which couples save. After 'moving-in'probably the first things required are those from the tool box, the hammer and tacks or nails.

The average handyman is well aware of all the items he wants to complete his tool chest but for those who are beginning to accumulate their tackle, and perhaps buy as and when they spot a bargain, here is a helpful list. Blowlamp, bradawl, brace and bits, brushes (paint 3, and distemper 1), chisel, chopper, claw-hammer, files (half-round and flat), fuse wire (5 amp.), hand-saw (24ins.), iron-plane, linseed oil for keeping paint brushes in good order, oilstone, pipegrips (1 pair), pliers (with insulated handles), putty knife, rag and oil for greasing tools, rule (2ft., steel), scraper, screwdrivers (large and small), soldering iron, solder and soldering paste, spanner (adjustable), square, tenon-saw, trowel, vice (steel), and wood saw.

 Although tap washers are easily procurable from any good ironmonger's shop, it is worthwhile keeping a supply in the tool kit for emergencies.

If a washer goes west after the shops are closed on a Saturday, it is far better to do the job right away than wait until Monday. It saves water from being wasted, and — far more important — it avoids jangled nerves if that tap can be immediately prevented from constantly dripping.

Oil-treated, compressed leather washers are the best for cold water taps, and vulcanized rubber washers for hot water taps.

Usually, two or three $\frac{1}{2}$ in. washers for ordinary taps, and $\frac{3}{4}$ in. washers for bath taps are sufficient to have on hand.

A word about nails and screws. Never mix them up with all the oddments in an old box. It is asking for a frayed

In manifiliti (humi

Ground level

temper in an emergency, just when you specially need to be cool, calm, and collected.

Discarded cocoa or mustard tins prove very useful receptacles for nails and screws to be kept separately in their respective sizes. Even better still are small glass jars so that the contents can be seen quickly.

When the 'man of the house' is out and an emergency arises, the housewife frequently has to use her ingenuity in carrying out small household repairs. It is always advisable therefore, to keep a small set of simple tools handy for her, such as a hammer, pair of pliers, pair of pincers, screwdriver, small bradawl, a half-round file, and an adjustable file, in addition to a couple of tins of small nails and tacks.

This might save the tired worker a job on his return! (E.M.B.)

in the ground, because the charred wood acts as a deterrent to harmful fungus growths.

FENCE SENSE

(((IIIII)))

Dry-rot shrinks wood. Wobbling fences are caused through shrinkage of the stump which in consequence becomes loose in its socket. For that reason never bury a post in concrete. If you do, you will be providing a permanent socket for it to wobble in.

When set in soil a wobbly post that is not too far gone can be firmed up by

digging round to expose the stump, scraping away the spongy surface and replacing the soil, tamping it firmly. The rotten scrapings should, of course, be removed so that they will not contaminate the sound wood.

When re-creosoting a fence — an operation which should be carried out with two liberal coats every three years — scrape away some of the soil from the butt of each post and bore a $\frac{1}{2}$ in. diameter hole slanting downwards. Insert a funnel in

the hole and fill with creosote, sealing the mouth with a dab of putty.

The creosote will work upwards and downwards with the grain of the wood, so helping to preserve its heart.

charred over a bonfire before inserting **364**

T is remarkable how long the butt of

an oak fence post lasts considering

the damp conditions to which it is

subjected. It will last even longer if it is





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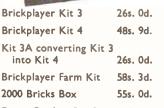
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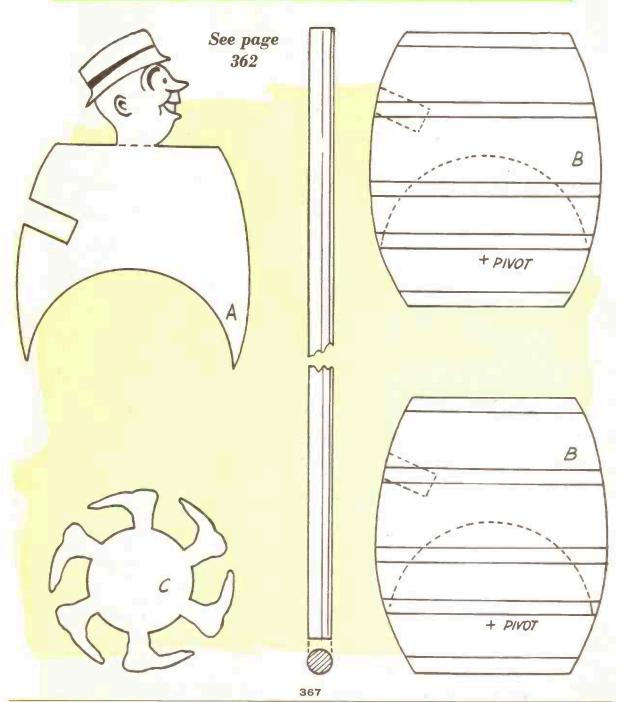
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